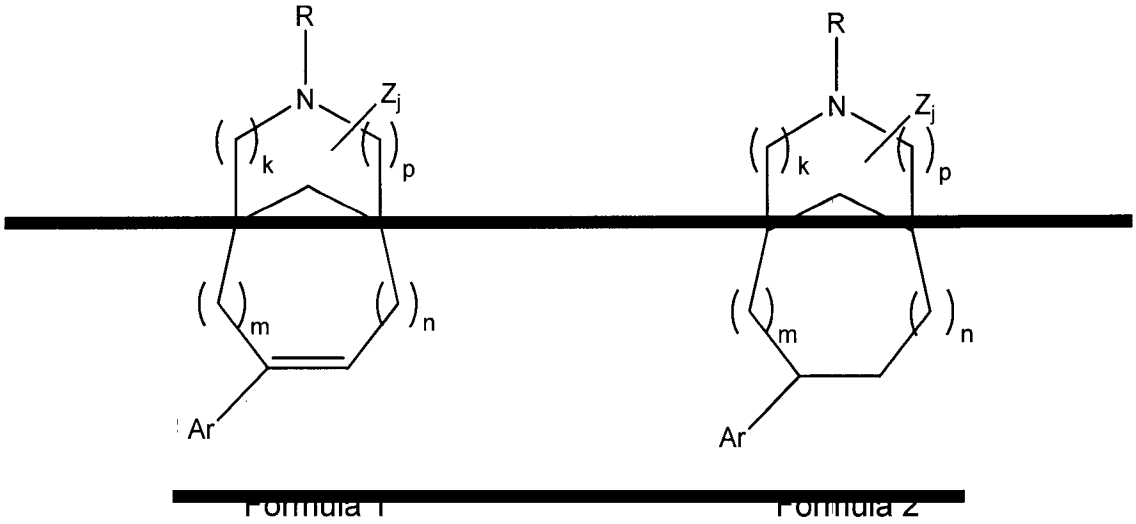
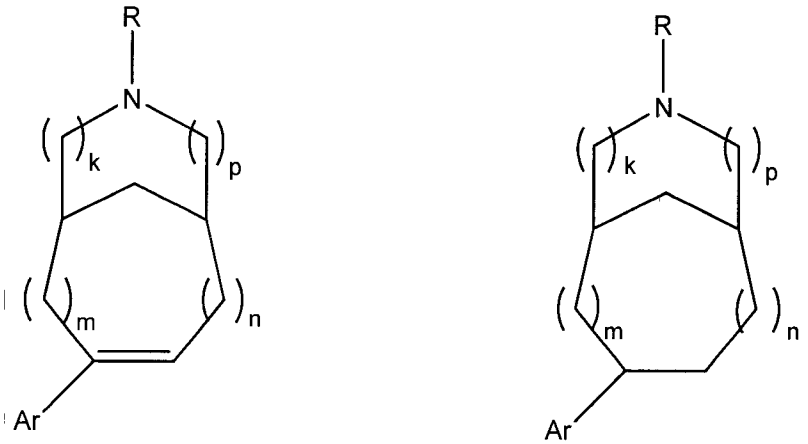
In the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application. Amendments are shown by addition and ~~deletion~~ or [[deletion]].

1. (Currently amended) A compound of Formulas 1 or 2:



Formula 1 Formula 2



Formula 1 Formula 2

wherein k and p are each 1, m and n are individually 0 or 1;

provided that if m is 1, then n is 0, and if n is 1, then m is 0;

Ar is pyridine, optionally substituted at any position with a substituent Z~~, as defined below~~;

~~wherein Z_j refers to j number of Z substituents, which substituents can be present at any carbon atom on the azabicyclic ring,~~

~~j is 0, 1, or 2;~~

~~each~~ Z is~~, individually,~~ selected from the group consisting of lower alkyl, ~~substituted alkyl,~~ lower alkenyl, ~~substituted alkenyl, heterocyclyl, substituted heterocyclyl,~~ cycloalkyl, ~~substituted cycloalkyl,~~ ~~aryl~~ phenyl, ~~substituted aryl, alkylaryl, substituted alkylaryl, arylalkyl~~ benzyl, ~~substituted arylalkyl,~~ halo, -OR', -NR'R", $-CF_3$, -CN, $-NO_2$, -C≡CR', -SR', ~~$-N_3$, -C(=O)NR'R", -NR'C(=O) R", -C(=O)R', -C(=O)OR', -OC(=O)R', -O(CR'R")$_f$C(=O)R', -O(CR'R")$_f$NR"C(=O)R', -O(CR'R")$_f$NR"SO_2R', -OC(=O)NR'R", -NR'C(=O)O R",~~ and -SO_2R'~~, -SO_2NR'R", and -NR'SO_2R"~~;

where R' and R" are individually hydrogen, lower alkyl, cycloalkyl~~, heterocyclyl~~, ~~aryl~~ phenyl, or ~~arylalkyl~~ benzyl~~, and r is an integer from 1 to 6; or~~

~~R' and R" can combine with the atoms to which they are attached to form a 3- to 7-membered saturated or unsaturated ring~~ ;

~~wherein said alkyl, alkenyl, aryl, cycloalkyl, heterocyclyl, alkylaryl, and arylalkyl may be substituted with one or more substituents selected from the group consisting of halo, -OR', -NR'R", $-CF_3$, -CN, $-NO_2$, -C≡CR', -SR', $-N_3$, -C(=O)NR'R", -NR'C(=O) R", -C(=O)R', -C(=O)OR', -OC(=O)R', -O(CR'R")$_f$C(=O)R', -O(CR'R")$_f$NR"C(=O)R', -O(CR'R")$_f$NR"SO_2R', -OC(=O)NR'R", -NR'C(=O)O R", -SO_2R', -SO_2NR'R", and -NR'SO_2R";~~

~~where R' and R" individually are as defined;~~ and

R is hydrogen, unsubstituted lower alkyl, unsubstituted arylalkyl, unsubstituted alkoxycarbonyl, or unsubstituted aryloxycarbonyl;

or a pharmaceutically acceptable salt thereof.

2. (Cancelled)

3. (Cancelled)

4. (Original) The compound of Claim 1, wherein Ar is 3-pyridinyl.

5-10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

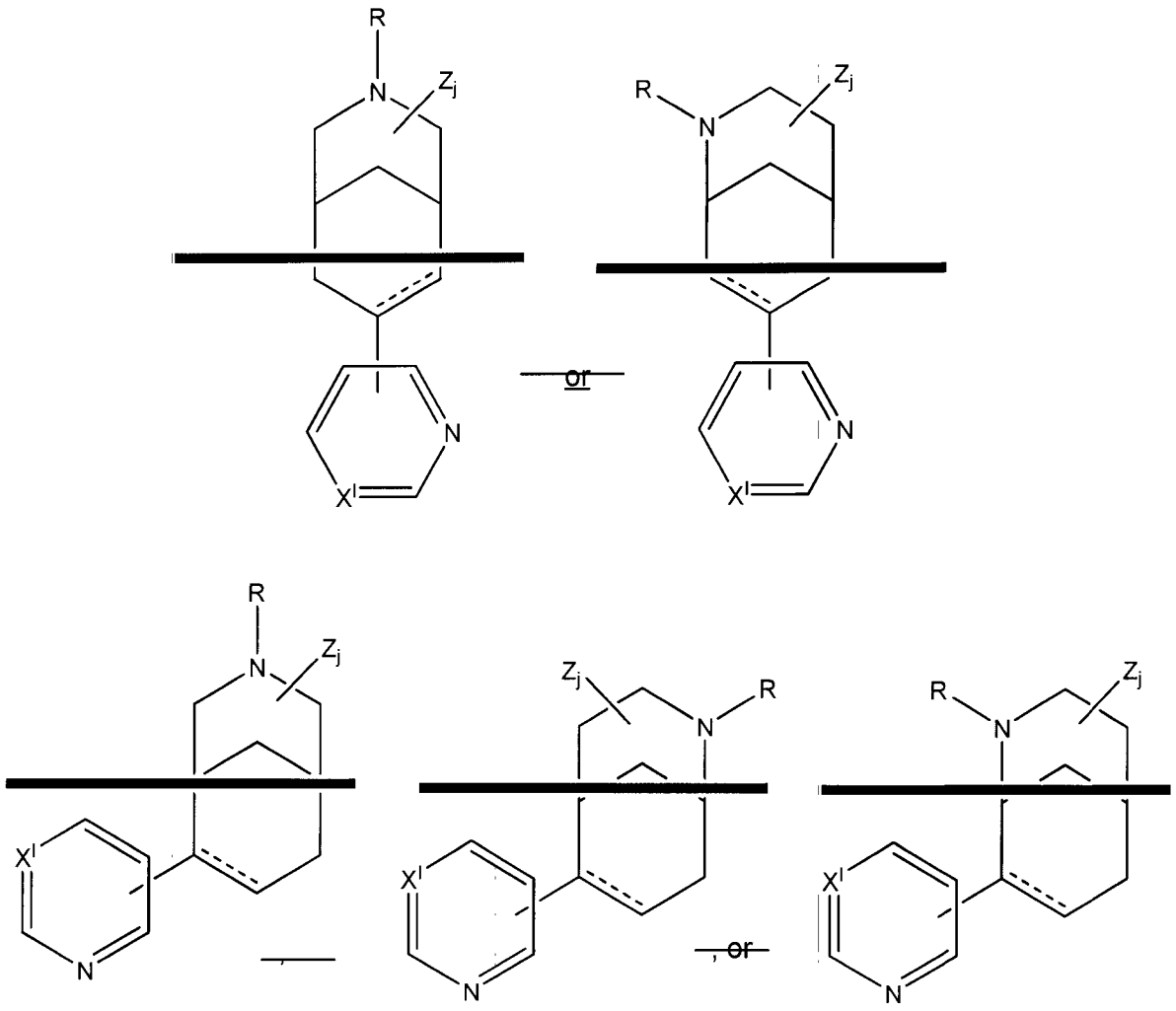
14. (Cancelled)

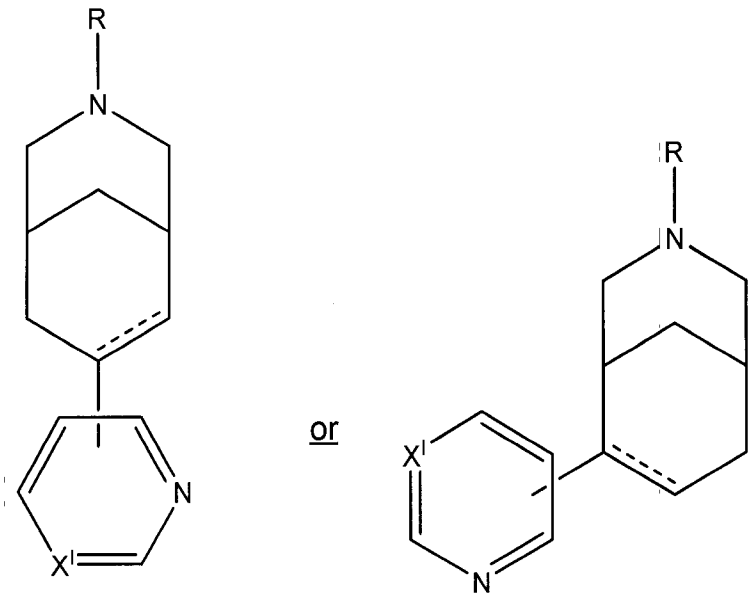
15. (Original) The compound of Claim 1, having a structure as in Formula 2, wherein the carbon at which the azabicyclic ring is attached to the Ar moiety has *R* stereochemistry.

16. (Original) The compound of Claim 1, having a structure as in Formula 2, wherein the carbon at which the azabicyclic ring is attached to the Ar moiety has *S* stereochemistry.

17. (Cancelled)

18. (Currently Amended) A compound selected from the group consisting of:


R
N
Zj
X'
or
, or



wherein:

X^1 is -CH- or -CZ-;

~~wherein Z_j refers to j number of Z substituents, which substituents can be present at any carbon atom on the azabicyclic ring,~~

~~j is 0, 1, or 2,~~

~~each~~ Z is~~, individually,~~ selected from the group consisting of lower alkyl, ~~substituted alkyl,~~ lower alkenyl, ~~substituted alkenyl, heterocyclyl, substituted heterocyclyl,~~ cycloalkyl, ~~substituted cycloalkyl, aryl~~ phenyl, ~~substituted aryl, alkylaryl, substituted alkylaryl, arylalkyl~~ benzyl, ~~substituted arylalkyl,~~ halo, -OR', -NR'R", $-CF_3$, -CN, $-NO_2$, -C≡CR', -SR', ~~$-N_3$, -C(=O)NR'R", -NR'C(=O) R", -C(=O)R', -C(=O)OR', -OC(=O)R', -O(CR'R")$_r$C(=O)R', -O(CR'R")$_r$NR"C(=O)R', -O(CR'R")$_r$NR"SO_2R', -OC(=O)NR'R", -NR'C(=O)O R",~~ and -SO_2R'~~, -SO_2NR'R", and -NR'SO_2R"~~;

where R' and R" are individually hydrogen, lower alkyl, cycloalkyl~~, heterocyclyl~~, ~~aryl~~ phenyl, or ~~arylalkyl~~ benzyl~~, and r is an integer from 1 to 6; or~~

~~R' and R" can combine with the atoms to which they are attached to form a 3- to 7-membered saturated or unsaturated ring~~ ;

~~wherein said alkyl, alkenyl, aryl, cycloalkyl, heterocyclyl, alkylaryl, and arylalkyl may be substituted with one or more substituents selected from the group consisting of halo, -OR', -NR'R", $-CF_3$, -CN, $-NO_2$, -C≡CR', -SR', $-N_3$, -C(=O)NR'R", -NR'C(=O) R", -C(=O)R', -C(=O)OR', -OC(=O)R', -O(CR'R")$_r$C(=O)R', -O(CR'R")$_r$NR"C(=O)R',~~

~~-O(CR'R")$_r$NR"SO$_2$R', -OC(=O)NR'R", -NR'C(=O)O R", -SO$_2$R', -SO$_2$NR'R", and -NR'SO$_2$R";~~

~~where R' and R" individually are as defined~~;

R is hydrogen, unsubstituted lower alkyl, unsubstituted arylalkyl, unsubstituted alkoxycarbonyl, or unsubstituted aryloxycarbonyl; and

the hashed bond indicates the presence or absence of a double bond;

or a pharmaceutically acceptable salt thereof.

19-69. (Cancelled)

70. (Cancelled)

71-72. (Cancelled)

73. (Previously presented) The compound of claim 1 wherein Ar is unsubstituted pyridine.

74. (Currently amended) The compound of claim 1, wherein Ar is pyridine substituted with one or more Z, individually selected from the group consisting of lower alkyl, amino, ~~aryl~~ phenyl, halo, and -OR', where R' is selected from lower alkyl or ~~aryl~~ phenyl.

75. (Cancelled).

76. (Currently amended) The compound of claim 74 wherein said lower alkyl is methyl or isopropyl.

77. (Previously presented) The compound of claim 1 wherein the compound is of Formula 1.

78. (Previously presented) The compound of claim 1 wherein the compound is of Formula 2.

79. (Previously presented) A compound selected from the group consisting of:

6-(3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(5-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(5-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(5-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(5-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(6-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(6-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(6-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(6-methoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(5-isopropoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(5-isopropoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(5-isopropoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(5-isopropoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(5-phenoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(5-phenoxy-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(5-phenoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(5-phenoxy-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(5-phenyl-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(5-phenyl-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(5-phenyl-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
7-(5-phenyl-3-pyridinyl)-3-azabicyclo[3.3.1]nonane,
6-(6-chloro-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
7-(6-chloro-3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene,
6-(6-chloro-3-pyridinyl)-3-azabicyclo[3.3.1]nonane, and
7-(6-chloro-3-pyridinyl)-3-azabicyclo[3.3.1]nonane
or a pharmaceutically acceptable salt thereof.

80. (New) A compound 7-(3-pyridinyl)-3-azabicyclo[3.3.1]non-6-ene or pharmaceutically acceptable salt thereof.

81. (New) The dihydrochloride salt of the compound of claim 80.

82. (New) A pharmaceutical composition comprising an effective amount of a compound of claim 1.

83. (New) A pharmaceutical composition comprising an effective amount of a compound of claim 79.

84. (New) A pharmaceutical composition comprising an effective amount of a compound of claim 80.

85. (New) A pharmaceutical composition comprising an effective amount of a compound of claim 81.